for its calculation. **METHODS:** A PubMed search was performed using the keywords: child/pediatrics, immunization, administration and direct service costs/costs and cost analysis/economics/health care costs/cost/fees, medical/cost benefit analysis, limited to publications in English, for infants up to 23 months, from 2004 onwards. Publications not referring to pediatric vaccination, not stating vaccine administration cost alone, and review studies were excluded. **RESULTS:** Fourteen out of 167 articles were included in the analysis. Eight (57%) studies were conducted in the US, two in the UK, and four in low/middle income countries. Vaccine administration settings were public/private combined (42%), public only (29%) and private only (29%). Six studies (43%) looked into any vaccination type, followed by Rotavirus (14%), and influenza vaccines (14%); all other vaccines 29%. Ten studies (72%) used secondary data sources. Two studies employed prospective primary data collection [Time and Motion (T&M) methodology, survey/diary] and two studies used primary and secondary data combined. Four studies (29%) employed a top-down costing approach, two studies a bottom-up approach, and three studies a mixed method (no information for 5 studies). For half of the studies the cost calculation methodology was not clear. Administration cost per dose ranged from $0.4-$4.5 for low/middle income countries and from $5.2-$61 for high income countries. Nine (64%) studies used vaccine administration cost as input into a pharmacoeconomic model, and six (36%) generated stand-alone results. **CONCLUSIONS:** Pediatric vaccine administration cost varies widely. Comparison of study results is difficult due to different country management practices, different costing structures, and different costing years. The cost was mainly calculated using secondary data. Only a few studies collected primary data. To generate more precise cost estimates, real-world evidence studies employing appropriate costing methodologies are warranted.

PIH15

ECONOMIC IMPACT OF CERVICAL CANCER AND ANOGENITAL WARTS IN THE MEXICAN HEALTH SYSTEM

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OBJECTIVES: Determine the cost to the Mexican health system, associated with the treatment of cervical cancer from 2004 to 2011 and to determine the cost associated with diagnosis and treatment of anogenital warts in the same period. **METHODS:** Data from the databases of the general direction of health information and the epidemiological surveillance system (SUIVE) were analyzed to determine the incidence reported by the government of cervical dysplasia, cervical cancer in situ and anogenital warts. Treatment costs were obtained according to DRG for cervical dysplasia and cervical cancer. For anogenital warts the cost was estimated according to data obtained through a Delphi panel made in 2013 (accepted for publication in the Mexican Urology Journal Ref. UROMX-D-15-00004). **RESULTS:** In the analyzed period of eight years, it was observed that there has been a decrease in spending in the treatment of cervical lesions by severe dysplasia or cancer in situ from 6,649,760,194 to 4,423,742,35 USD. Also the treatment of mild and moderate dysplasia has shown a decrease in spending from 22,798,807,215 to 21,507,746,764 USD. In the other way, an increase in spending is observed when treating anogenital warts, this goes from 410,728,813 to 573,330,965 USD. **CONCLUSIONS:** The observed results are interesting to mention, since the decrease in the expense of treating cervical dysplasia may reflect greater Epidemiological surveillance and early diagnosis. But, is interestingly the increase in spending anogenital warts treatment, which can also be a result of increased diagnosis and awareness by health professionals. In México vaccination campaign against human papilloma virus began in 2007, we can't currently assume a relationship between the cost of treating injuries and human papillomavirus vaccination, but is of great interest to continue the observation of the impact that could have this public health intervention in the Mexican population, as well as the budgetary impact for México.

PIH16

ANALYSIS OF TREATMENT COST FOR UTERINE FIBROIDS IN UKRAINE

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OBJECTIVES: Uterine fibroids (UF) are the most common benign gynecological tumors. Prevalence data range from 5% to 21% of adult women in reproductive age. Despite the progress in the development of modern effective drugs the primary treatment is still surgical interventions. At the same time, the trend in recent years of the increasing of the incidence of UF in younger women, expansion of childbearing age limits period necessitates the revision of management of UF. The aim of the study was to calculate the average cost of hormonal therapy of UF in Ukraine for a minimum period of 3 months, considering that the main aim of this therapy is to manage bleeding and pain symptoms and to provide pre-operative treatment of UF. **METHODS:** We analyzed the cost of treatment hormones per patient for course. We used the real data from medical records of patients who were treated in the Lviv Regional Perinatal Center and Lviv Regional Clinical Hospital in 2014. We have analyzed almost 300 stories diseases for 2014. We used the prices from Ukrainian database of Morion company (Kiev) on 01.01.2015 (1 USD =15,75 UAH). **RESULTS:** In Ukraine for the treatment of UF often are used these treatment hormonal schemes. We calculated the costs for course per patient in 3 months duration. The treatment costs are: mifepristone (tab.50 mg №30) – $184 (□2895); goserelin acetate (implant 3,6 mg) – $419 (□6600)/triptorelin (powder for susp. for injection 3,75 mg) – $571 (□9000); ulipristal acetate (tab. 5 mg №28) – $595 (□9375). **CONCLUSIONS:** Hormonal schemes of treatment are quite expensive for Ukrainian woman. In particular, the scheme of ulipristal is three times more expensive than the scheme with mifepristone. Almost all patients fully pay costs out-of-pocket. So implementation of health insurance and reimbursement policies of hormonal medicines is actual and on time in Ukraine.

PIH17

WITHDRAWN

PIH18

COST-EFFECTIVENESS OF 13-VALENT PNEUMOCOCCAL CONJUGATE VACCINATION IN KAZAKHSTAN

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OBJECTIVES: The aim of the study was to investigate the cost-effectiveness of 13-valent pneumococcal conjugate vaccine (PCV-13) programme for children in Kazakhstan from the perspective of Ministry of Health. **METHODS:** A Markov model was constructed to estimate the effects and directs costs of PCV-13 programme compared to other PCV programmes for newborns initiated in Kazakhstan. Treatment efficacy and transition probabilities were synthesized from local registries of vaccination with 5 year follow-up. The characteristics of patient cohort and treatment costs (vaccine cost, monitoring, adverse effects management) in year 2014 Kazakhstani tenge (KZT) were estimated from republican official sources. Annual 3% discounting rate and 1 year cycles (with half-cycle corrections) were utilized for the model. Robustness of the model parameters was explored by one-way and probabilistic sensitivity analysis. **RESULTS:** Analysis of the registries showed significant decrease of incidence of diseases assosiated with S. pneumoniae in children that received the PCV-13. Moreover, the introduction of PCV-13 decreased the under 1-age mortality due to pneumonia by half (95%CI, p value=0.001). As a result of 5 year stimulation of the model, the CER of PCV-13 was estimated as 8432 tenge/LYG or 8574 tenge/QALY, whereas CER for no PCV-13 was estimated as 7441 tenge/LYG or 7605 tenge/QALY. ICER was estimated as 122 070 tenge/QALY, which is within the cost-effectiveness threshold values recommended by WHO. **CONCLUSIONS:** The introduction of PCV-13 seems to be a cost-effective programme in Kazakhstan. These findings may better inform decision makers regarding formulary inclusion and reimbursement in the vaccine programmes in Kazakhstan.

PIH19

IMPLICATIONS OF EMPLOYER COVERAGE OF CONTRACEPTION: COST-EFFECTIVENESS OF CONTRACEPTION UNDER AN EMPLOYER MANDATE

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OBJECTIVES: Mandatory employer-based insurance coverage of contraception in the U.S. has been a controversial component of the Affordable Care Act (ACA). Prior research has examined the cost-effectiveness of contraception in general; however, no studies have developed a formal decision-model in the context of the new ACA provisions. As such, this study aims to estimate the relative cost-effectiveness of contraception from the employer and societal perspectives, taking into consideration newer regulations allowing for religious exemptions. **METHODS:** A decision-tree was developed from the employer and societal perspectives to simulate costs and outcomes associated with all contraceptive methods covered by the ACA. Method-specific estimates of contraception access, utilization, adherence, failure rates, outcomes, and costs were derived from the literature. Employer coverage rates and covariates (age, income, marital status, and access) were varied through sensitivity analysis. **RESULTS:** Compared to full coverage of contraception, providing no coverage resulted in 4.9 more pregnancies per 100 women of childbearing age. This subsequently increased the number of live births (3.6 per 100) and terminations (1.3 per 100). Providing no coverage for contraception also resulted in greater societal healthcare costs owing to this increase in pregnancies. Coverage via a health savings account (HSA) resulted in a lower number of pregnancies and reduced costs due to the greater access to prescribing pharmacies. **CONCLUSIONS:** Although lack of coverage reduced drug costs, it ultimately resulted in a greater number of unintended pregnancies. Whether the objection for coverage is due to costs or increasing terminations, denying full coverage of contraceptives appears to have the opposite consequence of increasing total costs as well as the total number of terminations. Coverage of contraceptives via an HSA may provide a compromise.